

WHAT IS CLAIMED IS:

1. A scanning device comprising:
at least one laser;
5 at least one camera, wherein at least one laser and at least one camera are coupled to a
scanning head; and
at least one position sensor, coupled to the scanning head.
2. The scanning device of claim 1, further comprising at least one guide, wherein at least
10 one scanning head is coupled to at least one guide, and wherein at least one guide
restricts movement of the scanning head to a substantially linear motion.
3. The scanning device of claim 1, further comprising a computer interface device,
wherein the computer interface device is configured to correlate position information
15 from at least one position sensor with topography information from at least one
camera.
4. The scanning device of claim 1, wherein the device does not include a motive device
configured to move the scanning head during use.
- 20 5. The scanning device of claim 1, wherein the scanning head is manually positionable.
6. The scanning device of claim 1, wherein the device is configurable to be transported
in substantially one piece without the use of special transportation equipment.
- 25 7. The scanning device of claim 1, wherein at least one of the lasers is configurable to be
safely use in a facial area of a human.

8. The scanning device of claim 1, wherein at least one camera is positioned at about a 45 degree angle upward from horizontal.
9. The scanning device of claim 1, wherein the scanning device is configured to capture facial topography information in less than about 5 seconds.
10. A scanning device comprising:
at least one laser;
at least one camera, wherein at least one laser and at least one camera are coupled to a scanning head, wherein the scanning head is manually positionable; and
at least one position sensor, coupled to the scanning head.
11. The scanning device of claim 10, further comprising at least one guide, wherein at least one scanning head is coupled to at least one guide, and wherein at least one guide restricts movement of the scanning head to a substantially linear motion.
12. The scanning device of claim 10, further comprising a computer interface device, wherein the computer interface device is configured to correlate position information from at least one position sensor with topography information from at least one camera.
13. The scanning device of claim 10, wherein the device does not include a motive device configured to move the scanning head during use.
14. The scanning device of claim 10, wherein the device is configurable to be transported in substantially one piece without the use of special transportation equipment.
15. The scanning device of claim 10, wherein at least one of the lasers is configurable to be safely use in a facial area of a human.

16. The scanning device of claim 10, wherein at least one camera is positioned at about a 45 degree angle upward from horizontal.
- 5 17. The scanning device of claim 10, wherein the scanning device is configured to capture facial topography information in less than about 5 seconds.
18. A method, comprising
- 10 determining topography information regarding a client's face by moving a scanning head of a non-contact scanning device relative to the client;
- determining position information of the scanning head as the scanning head is moving; and
- determining a computerized model of the client's face by correlating the determined position information and the determined topography information.
- 15 19. The method of claim 18, further comprising modifying the computerized model of the client's face.
- 20 20. The method of claim 18, further comprising modifying the computerized model of the client's face with user input.
21. The method of claim 18, further comprising modifying the computerized model of the client's face with computer assisted interpolation.
- 25 22. The method of claim 18, further comprising sending the computerized model of the client's face to a computerized manufacturing device to form a solid model.
23. A method, comprising

determining topography information regarding a client's face by moving a scanning head of a non-contact scanning device relative to the client;
substantially simultaneously determining position information of the scanning head and capturing topography information while moving the scanning head; and
5 determining a computerized model of the client's face by correlating the determined position information and the determined topography information.

10 24. The method of claim 23, further comprising modifying the computerized model of the client's face.

25. The method of claim 23, further comprising modifying the computerized model of the client's face with user input.

15 26. The method of claim 23, further comprising modifying the computerized model of the client's face with computer assisted interpolation.

27. The method of claim 23, further comprising sending the computerized model of the client's face to a computerized manufacturing device to form a solid model.

20 28. A method, comprising:
providing a solid model of a face;
applying an intermediate layer to the solid model;
applying a mask forming material over the intermediate layer to form a face mask;
and
25 separating the face mask from the solid model.

29. The method of claim 28, further comprising forming one or more openings in the face mask.

30. The method of claim 28, further comprising:
determining topography information regarding a client's face by moving a scanning
head of a non-contact scanning device relative to the client;
determining position information of the scanning head as the scanning head is
5 moving; and
determining a computerized model of the client's face by correlating the determined
position information and the determined topography information.
31. The method of claim 28, further comprising attaching one or more retaining devices
10 to the face mask.
32. The method of claim 28, wherein the intermediate layer is configurable to facilitate
separation of the face mask from the solid model.
- 15 33. The method of claim 28, wherein the intermediate layer comprises a polymer.
34. The method of claim 28, wherein the intermediate layer comprises a polypropylene.
35. The method of claim 28, further comprising applying a mold release agent to the
20 intermediate layer.
36. The method of claim 28, further comprising applying a mold release agent to the
intermediate layer, wherein the mold release agent comprises silicone.
- 25 37. A method, comprising:
determining topography information regarding a client's face by moving a scanning
head of a non-contact scanning device relative to the client;
determining position information of the scanning head as the scanning head is
moving;

- determining a computerized model of the client's face by correlating the determined position information and the determined topography information;
using the computerized model to provide a solid model of the client's face;
applying an intermediate layer to the solid model;
5 applying a mask forming material over the intermediate layer to form a face mask;
and
separating the face mask from the solid model.
38. The method of claim 37, further comprising forming one or more openings in the face
10 mask.
39. The method of claim 37, further comprising attaching one or more retaining devices to the face mask.
- 15 40. The method of claim 37, wherein the intermediate layer is configurable to facilitate separation of the face mask from the solid model.
41. The method of claim 37, wherein the intermediate layer comprises a polymer.
- 20 42. The method of claim 37, wherein the intermediate layer comprises a polypropylene.
43. The method of claim 37, further comprising applying a mold release agent to the intermediate layer.
- 25 44. The method of claim 37, further comprising applying a mold release agent to the intermediate layer, wherein the mold release agent comprises silicone.